



THE OCULAR IMMUNOLOGY  
AND UVEITIS FOUNDATION  
*Dedicated to Eye Disease Cure and Education*

## **Connection Between Arthritis and Ocular Disease**

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The eye is made up primarily of collagen, as are ligaments, tendons, and tissue within joint spaces. It is, perhaps, primarily because of this similarity in composition that the eye is often affected by many of the same diseases which affect joints. Some of these disorders include juvenile idiopathic arthritis, adult rheumatoid arthritis, systemic lupus erythematosus, relapsing polychondritis, Behcet's disease, granulomatosis with polyangiitis (formerly called Wegener's disease), polyarteritis nodosa, and scleroderma or systemic sclerosis.

Additionally, the type of vasculature that is present in the eye has special characteristics that produce an extraordinarily sensitive "barometer" or "sentinel canary" in the eye for potentially lethal vasculitis that can be associated with the aforementioned collagen vascular diseases.

We know from considerable experience that, even when a patient's rheumatoid arthritis appears to be 'burned out' with respect to active joint inflammation, they may still have subclinical rheumatoid vasculitis affecting various internal organ systems or active ocular inflammation. The eye inflammation may be a very potent indicator of such subclinical potentially lethal vasculitis.

In patients with systemic rheumatologic disease who present with ocular involvement such as retinal vasculitis, uveitis, scleritis, or peripheral ulcerative keratitis, this is considered a strong indication for careful evaluation for possible underlying systemic vasculitis affecting internal organs. Such sight-threatening ocular manifestations are also regarded as requiring prompt and aggressive systemic immunomodulatory therapy to prevent irreversible ocular damage.

We have observed numerous cases in which patients with systemic lupus erythematosus appear clinically stable from a systemic standpoint, despite the development of new-onset uveitis, scleritis, or retinal vasculitis in one eye. In some instances, failure to recognize these ocular findings as a warning sign has been followed by progression to life-threatening central nervous system vasculitis and/or lupus nephritis when systemic therapy was not intensified.

Over the past 45 years, we have therefore worked to increase awareness among ophthalmologists worldwide, as well as rheumatologists and other internists, of the eye as a valuable indicator of the severity of associated arthritic and collagen vascular disease.